

# AVE\_June2005 Flight Summary

## 17 June 2005

### General Information

**Flight date** – 17 June 2005

**Flight description** – Flight 5 AVE mission

**Flight duration** – 5.7 hours

**Crew** – Rick Hull, John Bain (281-244-9661)

**Instruments flown (18)**: ACAM, Argus, CAFS, CPL, CIMS, FCAS/NMASS/MACS, Harvard Water Vapor, JLH, IRIS, MMS, MTP, Ozone, PANTHER, PT, S-HIS, WAS

**Instruments not flown**: None

### Flight Log

<b>MMS ON</b>	11:53	<b>Takeoff</b>	12:13	<b>Begin Descent</b>	4:56
<b>Before Taxi</b>	12:10	<b>Climb/5000</b>	12:16	<b>Landing</b>	5:36

### Gear extension/retractions

<b>Gear Up</b>	12:13	5:03	5:20	5:26		
<b>Gear Down</b>	5:01	5:10	5:25	5:34		

### Weather Observations

Climb-Out:

- On climb-out, we passed through a scattered cumulus layer at 4,000 ft. Above this was clear but hazy.

Cruise:

- The sky was clear with a widely scattered cumulus layer near the ground below us.
- At 30 miles south of waypoint 8, there was a high stratus layer to the west of us.

Descent:

- On descent, we passed through a scattered cumulus layer at approximately 5,000 ft.

### Flight Profile

We flew the profile as planned. The last ascent was to 60 kft. We made the turn for Ellington 2 minutes (12 miles) before waypoint 14 due to low fuel. The times for the waypoints (WP) are as follows:

WP 3 at 1:04 heading south and 1:08 heading north, WP 4 at 1:31, WP 5 at 1:49 and 57.4 kft, WP 6 at 2:08, WP 7 at 2:27, WP 8 at 2:48, WP 9 at 3:04 heading north at 56.9 kft and at 3:10 heading south at 57.4 kft, WP 10 at 3:41, WP 11 at 3:57 (we were level at 41 kft at 3:55), WP 12 at 4:18, WP 13 at 4:35, and the turn for home 12 miles north of WP 14 at 4:52.

The yaw maneuver was initiated at 12:42 pm. The pitch maneuver was performed at 12:43 pm. The teardrop turn was initiated at 1:04 and completed at 1:07 pm.

### Instrument Notes

- The MTP display stopped working at 12:20. I cycled power and the display was restored at 12:32. The display died again at 1:55. I cycled power twice with no success. The display returned at 2:15 at 49 kft. It died again at 57 kft at 3:10, came back very fuzzy at 52 kft at 3:44, then cleared up at 3:48 at 47 kft. It died again at 4:45 at 59 kft. and then came back when we descended to 50 kft.
- WAS 1 was turned on at 12:28. WAS 2 was turned on at WP 3 at 1:31, then off at 1:49 at WP 5 (57.4 kft). WAS 2 was turned on at 2:48 at WP 8, then off at 3:05 at WP 9 (57 kft). WAS 2 was turned on at 4:18 at WP 12, then off at 4:35 at WP 13 (58.5 kft). WAS 2 was turned on at 4:56 at 60 kft for the final descent.
- The Harvard water vapor light came on at 6,500 ft during descent, as expected. No action was taken.
- The CIMS fail light came on at about 3,000 ft during descent, as expected. No action was taken.

### To ftp for the nav data:

IP address 128.157.138.64

Username: [anonymous@wb57f.asds.net](mailto:anonymous@wb57f.asds.net)

Password: <any email address>

The directory is: WB57F\_Processed/AVEJUN05